

PERITONEAL DIALYSIS IN HIV INFECTED PATIENTS - A GOOD OPTION?

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INTRODUCTION AND AIMS

Kidney disease in human immunodeficiency virus (HIV) infected patients was firstly described in 1984¹. Since then, many other associations with this infection were observed. It is known that 5 to 10% of HIV infected patients will develop kidney dysfunction during the course of HIV disease².

However, few are the studies that revise the outcome of HIV infected patients with end stage renal disease (ESRD) in regular peritoneal dialysis (PD) programme.

The aim of this study was to review the clinical characteristics and the outcome of HIV infected patients receiving PD treatment and to compare this population with a group of non-HIV infected, randomly selected, matched for age, gender, and presence of diabetes (DM).

POPULATION AND METHODS

This was a retrospective study that reviewed clinical and laboratorial data from all HIV infected patients treated with PD in a single center from 1995 to 2010.

In order to evaluate differences from non-HIV infected patients, we compare two populations with similar demographic characteristics (age, gender and presence of diabetes)

Clinical characteristics: age, gender, race, co-morbidities (HBV, HCV, DM), HIV stage, highly active antiretroviral treatment (HAART). Infectious complications during PD treatment, in-patient, PD programme and patient survival.

Laboratorial data: KTw/V, PET, Creatinine clearance (CrCl)

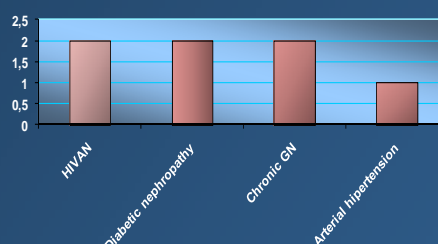
RESULTS

7 HIV infected patients treated with PD in our center from 1995 to 2010

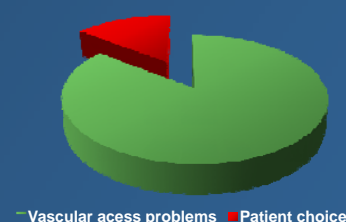
Clinical characteristics of our HIV infected patients

Gender: female / male	4 / 3
Mean age (years)	40.9±15.2
Black / White	4 / 3
Presence of diabetes	2
Presence of hypertension	3
VIH-1 / VIH-2	6 / 1
AIDS stage	2
HAART	4

Causes of kidney failure



Choice for PD



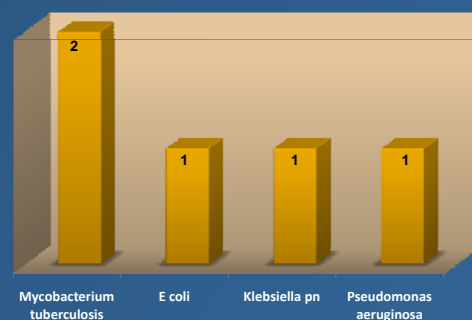
Clinical outcome of our HIV infected patients

Mean time in PD programme (M)	33.1 20.3
PD programme failure	100%
Patient death	3
Hemodialysis transference	4
PET : low/ mean low	7
KTw/V	1.96±0.26
CrCl (ml/min)	3.1±2.1
Hospitalizations rate	100%
Mean hospitalization / patient	5.1 2.3
Hospitalization days	11.5 5.7

Death causes
AIDS
Grawitz tumor
Isquemic stroke

Hemodialysis transference
Peritoneal tuberculosis
Peritoneal failure
UF failure type 1

Peritonites (excluding G+)



	HIV	Não HIV	p
Black / White (%)	57% / 43%	0 / 100%	0.01
Hemodialysis transference	86%	14%	0.004
Mean time in PD programme	33.1 20.3	28.9 11.7	>0.05
PD programme failure	100%	43%	0.03
Peritonites rate	1.3±1.5	0.9±0.3	>0.05
Hospitalizations	5.1 2.3	1.7 1.4	0.005
Hospitalizations days	11.5 5.7	5.3 4.3	0.04
Mortality rate	43%	14%	>0.05

CONCLUSIONS

Comparing to the control population, black race was more common in HIV infected patients, and these patients had a greater tendency to start dialysis from hemodialysis. Peritonites incident rate was superior in HIV infected patients, as well hospitalizations. Mortality rate was superior in HIV infected patients.

PD is a good dialysis modality for HIV patients.

Peritonites rate was not statistically different from non- HIV infected patients.

However, etiologic agent was quite different, leading to PD failure in 3 (peritoneal tuberculosis in 2 pts, *Pseudomonas aeruginosa* infection in 1 pt).

References:

- 1- Pardo V, Aldana M, Colton RM, et al – Glomerular lesions in the acquired immunodeficiency virus. *Ann Intern Med*, 1984; 101(4): 429 – 434
- 2- Ross MJ, Klotman PE. Recent progress in HIV- associated nephropathy. *Curr Opin Nephrol Hypertens* 2006; 13(12): 2997 - 3004